

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-287-1
Relating to Certification of New Motor Vehicles

RED SHIFT LTD.

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1988 model-year Red Shift Ltd. exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement</u> <u>Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
JA22.OV5FRS3	2.0 (122)	Exhaust Gas Recirculation Oxygen Sensor Three-Way Catalyst (Electronic Fuel Injection) (Turbocharger) (On-Board Diagnostics)

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the emission standards for this engine family:

<u>Hydrocarbons</u> <u>Grams per Mile</u>	<u>Carbon Monoxide</u> <u>Grams per Mile</u>	<u>Nitrogen Oxides</u> <u>Grams per Mile</u>
0.41	7.0	0.7

The following are the certification emission standards for this engine family:

<u>Hydrocarbons</u> <u>Grams per Mile</u>	<u>Carbon Monoxide</u> <u>Grams per Mile</u>	<u>Nitrogen Oxides</u> <u>Grams per Mile</u>
0.34	2.6	0.4

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the models listed also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s] ..." (Title 13, California Administrative Code, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2035 et seq.) and with Health and Safety Code Section 43204.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 16th day of February, 1988.



K. D. Drachand, Chief
Mobile Source Division

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Manufacturer RED SHIFT LTD. Engine Family JA22.OV5FRS 3
Evaporative Family 7AO-1C Engine Type L-4
Liters (CID) 2.0 (122)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
ECU-Electronic Control Unit
EI-Electronic Ignition
ESAC-Electronic Spark Advance
Control
VA-Vacuum Advance
VR-Vacuum Retard

Exhaust Emissions Control System

AIP-Air Injection - Pump
AIV-Air Injection - Valve
EGR-Exhaust Gas Recirculation
EIC-Electronic Injection Control
(Diesel Only)
EM-Engine Modification
SPL-Smoke Puff Limiter or
Throttle Delay
TOC-Trap Oxidizer, Continual
TOP-Trap Oxidizer, Periodical
DBC-Dual Bed Catalyst
OC-Oxidation Catalyst
TWC-Three-Way Catalyst
WUOC-Warm-Up Oxidation Catalyst
WUTWC-Warm-Up Three-Way Catalyst
OS-Oxygen Sensor
HOS-Heated Oxygen Sensor

Special Features

CFI-Central Fuel
Injection or
Throttle Body
Injection
EPFI-Electronic Port
Fuel Injection
MPFI-Mechanical Port
Fuel Injection
SFI-Sequential Fuel
Injection
DID-Diesel Injection-
Direct
DIP-Diesel Injection-
Prechamber
TC-Turbocharger
SC-Supercharger
IC-Intercooler or
Aftercooler
CCV-Combustion Chamber
Valve
OBD-On-Board Diagnostics

Fuel System

CFI, EPFI, MPFI, SFI,
DID, DIP, HOS, OS
nV-nVenturi Carburetor
VV-Variable Venturi Carburetor

VEHICLE MODELS:

DELTA 204T
(GM FIERO)

Engine: Front _____ Mid. X Rear _____
Drive: FWD _____ RWD X 4WD Full Time _____ 4WD Part Time _____

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1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. # A-287-1Passenger Cars ☒ Light-Duty Trucks _____ Medium-Duty Vehicles _____ Gas ☒ Diesel ☐ Page 2Manufacturer RED SHIFT LTD. Engine Family JA22.OV5FRS₃Liter (CID) 2.0 (122) Eng. Type L-4Emission Control Sys. (Special Features) EGR, TWC, OS, (MPFI), (TC)

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) Part No.	Fuel System Part No.	EGR Valve Part No.	Catalyst Part No.
87	DELTA 204T (6.3)	M-5	3000	16056432	10042029	17087206	251Q1356-B

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

Date of Issue _____ Revisions: _____